

## ABSTRACT OF THE DISCLOSURE

Back-end services such as authentication and mobile H.323 entity location update services include providing an authentication function within the control of a home gatekeeper and a distributed visitor location function (VLF) under the same control. In inter-zone communications, several embodiments are described for providing a home location functionality (HLF). The several HLF architectures include a distributed HLF, a centralized HLF, and a centralized HLF with communications via VLF only. Message flows can be smoothed by utilizing parallel message transmission where, for example, both a home and a visited location database may be signaled simultaneously and by utilizing direct messaging, for example, whereby a VLF communicates directly with a centralized HLF rather than via its associated gatekeeper function.